Please amend the claims as set forth below.

IN THE CLAIMS

Claims 1-16 **(Canceled)** without prejudice.

Please add new claims 17 through 53 as indicated further below.

17. **(New)** A method for assembling a valve stem to a wheel rim having an aperture formed therein comprising the steps of

determining a location of the aperture relative to a gauging station;

coaxially aligning a central axis of the aperture and a longitudinal axis of the valve stem with respect to one another prior to insertion of the valve stem through the aperture; and moving the valve stem relative to the rim along a programmable path of travel during the coaxially aligning step and along the aligned axes to insert the valve stem through the aperture, the path of travel defined with a programmable robotic manipulator having an arm capable of compound, multi-axial movement and having a plurality of programmed paths corresponding to a plurality of different size wheel rim and valve stem combinations to be assembled.

18. **(New)** The method of claim 17 wherein the determining step further comprises the step of:

identifying at least one physical feature of the rim with a machine vision system.

19. **(New)** The method of claim 17 wherein the aligning step further comprises the step of:

selectively moving the valve stem to the gauging station from one of a plurality of valve stem delivery stations in response to the determining step, each delivery station having a differently configured valve stem mounted thereon.

20. **(New)** The method of claim 17 wherein the determining step further comprises the step of:

identifying the rim as one of a plurality of different types of rims in response to inspection with a machine vision system.

21. **(New)** The method of claim 17 wherein the determining step further comprises the steps of:

positioning the rim on a rotatable table;

directing an optical sensor at the rim;

rotating the table and the rim; and

stopping rotation of the table and rim when the optical sensor is directed at the aperture.

22. **(New)** The method of claim 17 further comprising the step of:

tightening a nut over a threaded portion of the valve stem extending from the rim after the valve stem has been inserted with respect to the aperture.

23. **(New)** The method of claim 22 wherein the nut is tightened to the valve stem by a nut runner mounted on the robotic manipulator.

24. **(New)** The method of claim 22 wherein the nut is tightened to the valve stem by a nut runner mounted adjacent to the gauging station.

25. **(New)** The method of claim 17 further comprising the step of:

conveying valve stems to the delivery station in a serial fashion with conveying means.

26. **(New)** The method of claim 17 wherein the moving step further comprises the steps of:

holding the rim substantially stationary; and urging the valve stem toward the rim with the robotic manipulator.

27. **(New)** The method of claim 17 further comprising the step of:

moving the rim and attached valve stem from a gauging station to a subsequent processing station such that the rim is oriented with the valve stem in a predetermined angular position relative to the subsequent processing station.

28. **(New)** The method of claim 17 further comprising the step of:

grasping the valve stem with the robotic manipulator and moving along the path of travel in response to computer-controlled signals.

29. **(New)** The method of claim 28 further comprising the step of:

actuating the robotic manipulator to move the valve stem to the rim located at a delivery station.

30. **(New)** The method of claim 17 further comprising the step of:

grasping the valve stem with the robotic manipulator computer-controlled and having a valve-stem-gripper-attachment articulatable and positionable to be in a predetermined orientation with respect to the aperture in the rim.

31. **(New)** The method of claim 30 further comprising the step of:

orienting the aperture of the wheel rim in a predetermined location with respect to the valve-stem-gripper-attachment as a result of articulation and positioning of the valve-stem-gripper-attachment by the robotic manipulator prior to the inserting step.

32. **(New)** The method of claim 30 further comprising the step of:

orienting the aperture of the wheel rim in a predetermined location with respect to gauging station as a result of rotational movement of the rim until the aperture is properly located with respect to the gauging station prior to the inserting step; and

the inserting step performed with the valve-stem-gripper-attachment in a predetermined position with respect to the gauging station as a result of articulation and positioning of the valve-stem-gripper-attachment by the robotic manipulator prior to the inserting step.

33. **(New)** An apparatus for assembling a valve stem to a wheel rim having an aperture formed therein comprising:

means for determining a location of the aperture relative to a gauging station;

means for coaxially aligning the central axis of the aperture and a longitudinal axis of the valve stem with respect to one another prior to insertion of the valve stem through the aperture; and

means for moving the valve stem relative to the rim along a programmable path of travel including alignment of the central axis of the aperture with the longitudinal axis of the valve stem and along the aligned axes to insert the valve stem through the aperture, the path of travel defined with a programmable robotic manipulator having arm capable of compound, multi-axial movement and having a plurality of programmed paths corresponding to a plurality of different size wheel rim and valve stem combinations to be assembled.

34. **(New)** The apparatus of claim 33 wherein the means for determining further comprises:

a machine vision system to identify at least one physical feature of the rim.

35. **(New)** The apparatus of claim 34 wherein the aligning means further comprises:

the robotic manipulator to selectively move the valve stem from one of a plurality of delivery stations having different valve stems mounted thereon in response to the identification by the machine vision system.

36. **(New)** The apparatus of claim 33 wherein the means for determining further comprises:

a machine vision system to identify the rim as being one of a plurality of different rims.

37. **(New)** The apparatus of claim 37 wherein the means for tightening further comprises: a nut runner mounted on the robotic manipulator.

38. **(New)** The apparatus of claim 33 wherein the means for tightening further comprises:

a nut runner mounted adjacent to a gauging station where the valve stem is moved relative to the rim to insert the valve stem with respect to the aperture.

39. **(New)** The apparatus of claim 33 further comprising: means for supplying valve stems in a serial fashion to a delivery station where the valve stem is moved relative to the rim to insert the valve stem with respect to the aperture.

40. **(New)** The apparatus of claim 33 wherein the means for moving further comprises: the robotic manipulator to urge the valve stem toward the rim.

41. **(New)** The apparatus of claim 33 further comprising:

the robotic manipulator for moving the rim and attached valve stem from a gauging station where the valve stem is mounted with respect to the aperture to a processing station while maintaining the valve stem in a predetermined angular position relative to the processing station.

42. **(New)** The apparatus of claim 33 further comprising:

means for grasping the valve stem with the robotic manipulator computer-controlled and having a valve-stem-gripper-attachment articulatable and positionable to be in a predetermined orientation with respect to the aperture in the rim.

43. **(New)** The method of claim 42 further comprising:

means for orienting the aperture of the wheel rim in a predetermined location as a result of movement of the rim at the gauging station prior to the valve stem being inserted by the robotic manipulator.

44. **(New)** A method for assembling a valve stem to a wheel rim having an aperture formed therein comprising the steps of:

determining the location of the valve stem aperture in the rim; and

operably engaging the valve stem with a robotic manipulator; moving the valve stem relative to the rim along a programmable path of travel;

coaxially aligning the valve stem and the aperture; and

inserting at least a portion of the valve stem through the aperture in the rim, wherein the path of travel is defined with a programmable robotic manipulator having an arm capable of compound, multi-axial movement and having a plurality of programmed paths corresponding to a plurality of different size wheel rim and valve stem combinations to be assembled.

45. **(New)** The method according to 44 further comprising the steps of operably engaging the valve stem and moving the valve stem towards the rim.

46. **(New)** The method according to claim 44 further comprising the step of securing the valve stem to the rim by tightening a nut over a threaded portion of the valve stem extending from the rim.

47. **(New)** The method of claim 44 further comprising the step of:

grasping the valve stem with the robotic manipulator computer-controlled and having a valve-stem-gripper-attachment articulatable and positionable to be in a predetermined orientation with respect to the aperture in the rim.

48. **(New)** The method of claim 47 further comprising the step of:

orienting the aperture in the rim to a predetermined location during movement of the valve stem with the robotic manipulator as a result of articulation and positioning of the valve-stem-gripper-attachment.

49. **(New)** The method of claim 47 further comprising the step of:

orienting the aperture in the rim to a predetermined location at a station prior to the inserting step.

50. **(New)** An apparatus for assembling a valve stem to a wheel rim having an aperture formed therein comprising:

means for determining the location of the valve stem aperture in the rim; and

means for operably engaging the valve stem;

means for moving the valve stem relative to the rim along a programmable path of travel; and

means for coaxially aligning the valve stem and the aperture to insert at least a portion of the valve stem through the aperture in the rim, wherein the path of travel is defined with a programmable robotic manipulator having an arm capable of compound, multi-axial

movement and having a plurality of programmed paths corresponding to a plurality of different size wheel rim and valve stem combinations to be assembled.

51. **(New)** The apparatus of claim 50 further comprising:

means for grasping the valve stem with the robotic manipulator computer-controlled and having a valve-stem-gripper-attachment articulatable and positionable to be in a predetermined orientation with respect to the aperture in the rim.

52. **(New)** The apparatus of claim 51 further comprising:

means for orienting the aperture of the wheel rim in a predetermined location with respect to the valve-stem-gripper-attachment as a result of articulation and positioning of the valve-stem-gripper-attachment by the robotic manipulator prior to inserting the valve stem.

53. **(New)** The apparatus of claim 52 further comprising:

means for orienting the aperture of the wheel rim in a predetermined location with respect to gauging station as a result of rotational movement of the rim until the aperture is located with respect to the gauging station prior to inserting the valve stem; and

the grasping means including the valve-stem-gripper-attachment in a predetermined position with respect to the gauging station as a result of articulation and positioning of the valve-stem-gripper-attachment by the robotic manipulator prior to inserting the valve stem.